



STATE OF MISSISSIPPI
PHIL BRYANT
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
TRUDY D. FISHER, EXECUTIVE DIRECTOR

March 7, 2014

VIA HAND DELIVERY

Trudy D. Fisher
Executive Director
Mississippi Department of Environmental Quality
515 East Amite Street
Jackson, Mississippi 39201

Re: In the Matter Of: Evidentiary Hearing Request Regarding Meridian POTW
NPDES Permit Modification (Water Ref. No. MS0020117), Lauderdale County,
Mississippi


Dear Ms. Fisher:

Enclosed for filing are the original and ten copies of the pre-filed rebuttal testimony of the Mississippi Department of Environmental Quality ("MDEQ") concerning the above-referenced matter. Specifically, MDEQ submits the following:

Affidavit (Rebuttal Testimony) of Harry M. Wilson, III

By copy of this correspondence, I have mailed copies of MDEQ's pre-filed rebuttal testimony, with exhibits, to Mr. Check and counsel for the City of Meridian.

Sincerely,


Lisa Thompson Ouzts
Senior Attorney

Enclosures

Cc: Austin D. (Dan) Check
Michael Goggans, Esq.

BEFORE THE MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

IN THE MATTER OF:

EVIDENTIARY HEARING REQUEST REGARDING MODIFICATION OF NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR THE CITY OF MERIDIAN'S PUBLICALLY OWNED TREATMENT WORKS (NO. MS0020117), LAUDERDALE COUNTY, MISSISSIPPI

AFFIDAVIT

(REBUTTAL TESTIMONY)

STATE OF MISSISSIPPI

COUNTY OF HINDS



PERSONALLY APPEARED BEFORE ME the undersigned authority in and for the jurisdiction aforesaid, the within named HARRY M. WILSON, III, who, after being by me first duly sworn, stated on oath the following:

1. My name is Harry M. Wilson, III and I am the Chief of the Environmental Permits Division of the Office of Pollution Control of the Mississippi Department of Environmental Quality (MDEQ). I am over twenty-one years of age and have personal knowledge of the matters stated in the affidavit. My qualifications and work experience are included in my pre-filed direct testimony affidavit dated February 18, 2014. Mr. Austin (Dan) Check submitted direct testimony in this matter. Mr. Check seems mainly concerned that the MDEQ did not hold a public hearing to receive comments on the proposed modification of the City of Meridian's NPDES permit for its South POTW.
2. As I testified in my pre-filed direct affidavit, Mississippi law and Mississippi regulations give the Permit Board discretion to hold a public hearing on proposed NPDES permit modifications, and the MOA between MDEQ and EPA contains language indicating public

hearings are not required on every permit. Miss. Code Ann. § 49-17-29 (4)(a) (Permit Board has discretion to determine whether to hold a public hearing); 11 Miss. Admin. Code Pt. 6, R. 1.1.3.G (1)(a) (Permit Board has discretion to hold a public hearing); MOA § III.D.2, p. 12 (Exhibit B to my pre-filed direct affidavit) (“public notice of a public hearing, *if one is deemed to be appropriate*, shall be given at least thirty (30) days before the hearing.”). Additionally, federal regulations do not require a public hearing on a modification to an NPDES permit. Specifically, 40 C.F.R. § 124.12 (a)(1), which applies to State NPDES programs, only requires a public hearing when “on the basis of requests, [there is] a *significant degree of public interest in a draft permit*.” (emphasis added). In the present matter, MDEQ received two timely requests for a public hearing and one of those requests was withdrawn. State laws and regulations are consistent with the federal regulations and the MOA. MDEQ took the matter to the Permit Board which voted to deny the public hearing request.

3. As I testified in my pre-filed direct testimony, the Permit Board twice considered Mr. Check’s request for a public hearing and twice denied the request. MDEQ’s General Counsel Roy Furrh invited Mr. Check to the November 12, 2013, Permit Board meeting to personally present his public hearing request. Exhibit A (Roy Furrh Letters dated October 10, 2013, and, November 6, 2014). After hearing from Mr. Check, Mr. Whitehurst, and MDEQ staff at its November meeting, the Permit Board again denied Mr. Check’s request for public hearing. Mr. Check was also allowed to address the Permit Board regarding the proposed permit modification. After considering Mr. Check’s, Mr. Whitehurst’s, and MDEQ staff’s comments regarding the modification, the Permit Board voted to approve the modification.

4. Mr. Check characterized MDEQ's meeting with Andrew Whitehurst, with the Gulf Restoration Network, as a "secret" public hearing suggesting that the meeting was somehow inappropriate. MDEQ did not hold a "secret" public hearing with Mr. Whitehurst. As I testified in my pre-filed direct affidavit, I invited Mr. Whitehurst to meet with my staff and me to discuss concerns Mr. Whitehurst expressed during the public comment period. I informed the Permit Board at its November 12, 2013, meeting that I met with Mr. Whitehurst; thus, an allegation that this meeting was "secret" and the suggestion that this somehow violated any rights of Mr. Check or other members of the public is unfounded.
5. Mr. Check stated there has been no response "to date" to his request for public hearing and to public comments. As described in the preceding paragraph, MDEQ did respond to his public hearing requests by taking the requests to the Permit Board for a decision. Mr. Furrh also sent Mr. Check two letters regarding Mr. Check's hearing requests. MDEQ did not respond directly to Mr. Check regarding his comments; however, MDEQ addressed all the substantive public comments in an "Issues and Responses" document provided to the Permit Board prior to the Board's November meeting. Exhibit B. The permit modification in the present matter was issued November 12, 2013, and the Issues and Response document became part of the public record as of that day. This is consistent with the federal regulations.
6. Mr. Check stated that he attended the November 12, 2013, Permit Board meeting "of which there was a PRE-HEARING/Meeting before what was then presented to be the MDEQ Permit Board Meeting to "CONSIDER" Meridian's Permit Modification request." See Mr. Check's Pre-filed Written Testimony, p. 2. Mr. Check is aggrieved that he was not provided transcripts of these two "hearings." I am not sure what Mr. Check means by "pre-hearing/meeting." Assuming he is referencing the October 10, 2013, Permit Board meeting at

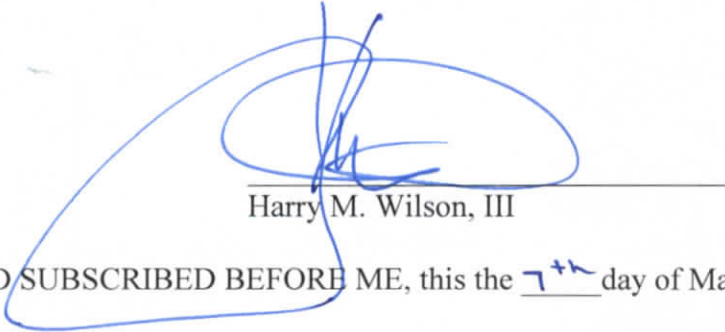
which the Board denied Mr. Check's public hearing request, that was a regular meeting of the Permit Board and not a hearing. The Permit Board does not transcribe its regular meetings. Assuming Mr. Check is referring to what he characterized as a "secret hearing" involving Andrew Whitehurst, that was a meeting, not a hearing, and there is no transcript of our meeting. MDEQ cannot produce what does not exist: Mr. Check's criticism on this point is unfounded. Mr. Furrh informed Mr. Check that the Permit Board's November meeting was not a hearing and thus there was no transcript. Exhibit C (November 27, 2013, Letter to Mr. Check). Mr. Furrh informed Mr. Check that he could arrange to review the audio tape of the November meeting by making a public records request. *Id.* To my knowledge, he did not do so.

7. Mr. Check alleges MDEQ "skirted" compliance with the Memorandum of Agreement ("MOA") between it and the U.S. Environmental Protection Agency and also "skirted" compliance with federal regulations 40 C.F.R. Part 123. Mr. Check did not articulate which provisions of the MOA or pinpoint which section of 40 C.F.R. Part 123 MDEQ supposedly violated. The MOA lays out the understanding between EPA and MDEQ regarding MDEQ's administration of the NPDES permitting program in Mississippi. The public participation provisions of the MOA are consistent with Mississippi law and regulations; thus, if Mr. Check believes MDEQ "skirted" compliance with the public participation requirements of the MOA he is mistaken. Mr. Check also complained that MDEQ "skirted" the requirements of federal regulations 40 C.F.R. Part 123. These regulations specify procedures EPA uses in approving, revising, and withdrawing state NPDES programs and set forth requirements states must meet to be approved by EPA to administer a state NPDES program. In approving Mississippi's NPDES program, and in entering an MOA with MDEQ approving the

Mississippi NPDES program. EPA obviously found MDEQ met the requirements specified in 40 C.F.R. Part 123. Mr. Check stated if Mississippi law and regulations were more stringent than the federal regulations then he would have “NO DOG IN THE HUNT.” Immediately following this statement Mr. Check accuses MDEQ of violating the MOA and 40 C.F.R. Part 123. The applicable state laws and regulations are as stringent as the federal regulations; thus, approval of the modification under state law and regulations would also constitute compliance with federal regulations. Without knowing which section of federal regulation 40 C.F.R. Part 123 Mr. Check believes MDEQ “skirted,” MDEQ cannot rebut Mr. Check’s allegations with precision.

8. Mr. Check refers to an Agreed Order the Mississippi Commission on Environmental Quality entered with Mississippi Power Company for its IGCC facility in Kemper County. That Agreed Order is for another facility and has no bearing on the issue before the Permit Board which is whether the modification of Meridian’s South POTW permit is meets legal and regulatory requirements. The Permit Rationale for Modification, attached as Exhibit D, lists the changes made to Meridian’s South POTW permit. In his pre-filed testimony, Mr. Check did not specify his concerns with the actual modifications to Meridian’s permit or demonstrate that these modifications were contrary to applicable laws and regulations. I cannot respond to technical concerns that are not expressed. I am satisfied that the modifications comply with all applicable federal and state laws and regulations and renew my recommendation that the Permit Board affirm its decision of November 12, 2014, to modify Meridian’s permit for its South POTW.

FURTHER THE AFFIANT SAYETH NOT.



Harry M. Wilson, III

SWORN TO AND SUBSCRIBED BEFORE ME, this the 7th day of March, 2014.


Notary Public



My Commission Expires:



STATE OF MISSISSIPPI
PHIL BRYANT
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
TRUDY D. FISHER, EXECUTIVE DIRECTOR

October 10, 2013

Mr. Austin D. Check
Post Office Box 3271
Meridian, MS 39303

Dear Mr. Check:

Re: Meridian POTW
Permit Modification
Water Ref. No. MS0020117
Lauderdale County

The Mississippi Department of Environmental Quality (MDEQ) received your comments in writing during the public comment period concerning the above referenced permit modification. In your comments you requested a public hearing. MDEQ Staff presented your petition for public hearing to the Mississippi Environmental Quality Permit Board (Permit Board) at its meeting on October 9, 2013. The Permit Board denied your request for a public hearing based on insufficient public interest to justify a public hearing. To clarify, there were no other pending requests for a public hearing for this matter.

The Permit Board will meet on Tuesday, November 12, 2013, at 9:00 A.M. in the Commission Hearing Room of the MDEQ at 515 Amite Street, Jackson, Mississippi, to consider the modification of the above referenced permit. Members of the Permit Board will have been provided copies of written public comments regarding the permit modification prior to the meeting. Even though the public comment period has closed on the subject application, the Permit Board typically will allow a representative of any opposition to make a brief statement to the Board.

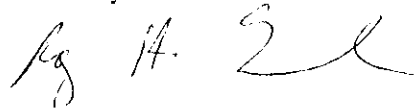
The Permit Board specifically directs the parties not try to restate the comments already placed into the record but to instead provide a summary of your position. If you intend to attend the Permit Board meeting and wish to have a representative speak to the Permit Board, please contact Mr. Bradley Crain of my staff at (601) 961 - 5177.



At this meeting, the Permit Board may issue the permit, deny the permit, or take the issue under advisement. Any interested party aggrieved by the initial decision of the Permit Board may file a request for an evidentiary hearing within thirty days of the Permit Board action.

If you have any questions, please contact Mr. Bradley Crain of our staff.

Sincerely,

A handwritten signature in black ink, appearing to read "R. H. Furrh", written in a cursive style.

Roy H. Furrh
General Counsel

RHF:dac



STATE OF MISSISSIPPI
PHIL BRYANT
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MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
TRUDY D. FISHER, EXECUTIVE DIRECTOR

CERTIFIED MAIL RETURN RECEIPT REQUESTED

November 6, 2013

Mr. Austin D. (Dan) Check
Post Office Box 3271
Meridian, MS 39303

Re: Meridian POTW
NPDES Permit Modification
Water Ref. No. MS0020117
Lauderdale County

Dear Mr. Check:

In response to your concerns expressed in your facsimile to me dated November 2, 2013, you are invited to attend the Mississippi Environmental Quality Permit Board ("Permit Board") meeting scheduled for 9:00 a.m. this Tuesday, November 12, 2013, in the Commission Hearing Room located at the Mississippi Department of Environmental Quality's ("MDEQ's") office at 515 East Amite Street in Jackson. The Permit Board will consider your renewed request for a public hearing included in your facsimile dated November 2, 2013, related to the referenced matter. If the Permit Board denies your renewed request for a public hearing, the Board will consider the proposed permit modification for the Meridian POTW on November 12. You are invited to attend this public meeting as the Permit Board typically allows brief comments of opponents to proposed environmental permits before making its decision on presented matters.

As indicated in my correspondence to you dated October 10, 2013, MDEQ will provide the Permit Board with all written comments, including your facsimile to me dated November 2, 2013, before its November 12 meeting. As discussed in my letter to you dated October 10, 2013, the Permit Board denied your initial request for a public hearing at its October 9, 2013, meeting based on Miss. Code Ann. § 49-17-29 (4) (a) (Rev. 2012) which provides in part that the Permit Board, **in its discretion, may** hold a public hearing or meeting to obtain comments from the public on its proposed action. Also, the Mississippi Commission on Environmental Quality's Wastewater Regulations (11 Miss. Admin. Code Pt. 6, Rule 1.1.3G.(1)(a)) state: **"If the Permit Board determines that a petition states sufficient cause or there is significant public interest**

LEGAL DIVISION

POST OFFICE BOX 2261 • JACKSON, MISSISSIPPI 39225-2261 • TEL: (601) 961-5171 • FAX: (601) 961-5349 • www.deq.state.ms.us
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in a draft permit for a public hearing, it may schedule such a hearing." The Permit Board considered your written request for a public hearing on October 9, but did not find sufficient cause or significant public interest related to the proposed permit modification; therefore, the Board denied your request. As you are aware, the Gulf Restoration Network withdrew its request for a public hearing and there are no other pending requests for a public hearing related to this matter.

Please be advised that you have been provided the opportunity to submit written comments related to your opposition of the proposed permit modification. You will also have an opportunity to address the Permit Board regarding your concerns at the Permit Board's meeting on November 12 before the Permit Board takes action. Before making its decision, the Permit Board will consider all written comments and any oral comment on November 12.

If you have any questions related to this correspondence, please call me at (601) 961-5260.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Roy Furrh', is written over the typed name.

Roy Furrh
General Counsel

RF:dac

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF POLLUTION CONTROL

Comments and Responses Concerning the Proposed Modification of
Meridian POTW, NPDES Permit No. MS0020117
Lauderdale County, Mississippi

The information contained within this document presents comments and/or concerns identified during a public notice period regarding the proposed modification of NPDES Permit No. MS0020117 for Meridian POTW (Also referred to as South Meridian POTW). The staff of the Department has addressed comments raised and presents responses herein.

Fewer parameters will be monitored at outfall 002 than are presently monitored at outfall 001.

Response: The following changes were made to permit in this modification:

- Fecal coliform limitations were removed from internal outfall 101 and 201 due to redundancy. Fecal coliform limitations are now required at outfall 002 before discharging to Sowashee Creek.
- Chlorine limitations were revised in internal outfall 101 from 0.011 mg/l monthly average to 0.3 mg/l minimum. The 0.3 mg/l limitation is required to ensure that an adequate supply of chlorine is the effluent from 101 to disinfect the effluent from internal outfall 201 when mixed. Outfall 002 has a 0.011 mg/l monthly average limitation to protect Sowashee Creek from chlorine toxicity during times of discharge.
- Corrected the seasonal limitation for BOD5 on internal outfall 101. The limitations were reversed based on the seasons.
- The flow on internal Outfall 201 will be done by calculations based on volume measurement, and not a continuous recorder.
- Sample types that were 24hr composites on internal outfall 201 have been changed to 8hr composites. The discharge period at 201 does not last longer than 8 hours.
- Corrected the seasonal limitations for BOD5 and Ammonia Nitrogen on outfall 002. The limitations were reversed based on the seasons.
- Added the following narrative requirement, "Effluent limitations and monitoring requirements for Outfalls 001, 002, 101, 201 as listed in this permit will only be applicable when the treated effluent from that outfall is ultimately discharged into Sowashee Creek." This means that if the effluent is sent to the Mississippi Power plant, then the effluent limitations and monitoring requirements will not apply.
- Added the following narrative requirement, "The facility shall record and make available upon request the durations of all discharges of treated wastewater from Outfall 002."

13261 PER20120003



Why are Percent removal of TSS and CBOD5 not being tracked for outfall 002?

Response: Percent removal limitations are included in both internal outfall 101 and 201 monitoring requirements.

Why is copper not one of the parameters included for outfall 002?

Response: Copper limitations are included in internal outfall 101 monitoring requirements.

The East treatment plant will have additional effluent to treat in the near future. How is this going to be handled in the permit?

Response: East Meridian POTW is designed at 1.0 million gallons per day (MGD). Flows are currently averaging 0.2 MGD. If in the future more flow is needed over the 1.0 MGD then an application, with a complete antidegradation study, would be required to modify the permit to address an expansion.

Are there any additional sources of city wastewater that join the Kemper pipeline between the East plant and the South plant?

Response: Only the East Meridian and South Meridian POTWs' treated effluent are connected to the pipeline.

Is the cooling water reservoir's NPDES permit MS0061751 being given consideration alongside the present NPDES permit for the Meridian South plant since the two permits are operating to treat and handle the same wastewater?

Response: The Meridian POTW permit is written to represent and be protective for a continuous daily discharge of treated wastewater into Sowashee Creek. Any treated wastewater that is being sent to the cooling reservoir is considered reuse water, and is not included in the permit.

Will reverse flows cause additional pollution problems, especially from fecal bacteria, as the effluents combine and are released to the Sowashee Creek in outfall 002?

Response: During reverse flow conditions the wastewater will be required to meet the limitations for Outfall 002 before discharging. This does include fecal coliform. South Meridian plant is required to maintain a minimum of 0.3 mg/l chlorine to disinfect the East Meridian plant's effluent to ensure compliance with this limitation.

Does the sampling point for the East treatment plant's internal outfall (201) allow for adequate measurement of parameters, including bacteria levels, before treated water from the East and South plants combine?

Response: All parameters in the East Meridian permit, except fecal coliform, are included in the monitoring requirements for internal outfall 201 of the modified Meridian POTW permit. Fecal Coliform is regulated in Outfall 002.

At what point does the treated waste water become the property of Mississippi Power Company?

Response: The treated wastewater becomes the property of Mississippi Power at the gate valve structure that is located at the South Meridian Plant.

What happens to the Phase II BOD limit for Meridian East?

Response: Phase II limits for East Meridian POTW are based on water quality modeling at the current East Meridian discharge point into Sowashee Creek. Phase II limitations for East Meridian POTW are active and the treatment system is currently complying with the limitations. The proposed modification to South Meridian POTW's permit will ultimately allow all treated effluent from East Meridian POTW to be discharge at the same point in Sowashee Creek as South Meridian POTW. The limitations for the South Meridian POTW are based on water quality modeling at that location. The modeling resulted in different limitations. This is due to different environmental conditions that exist between the two locations in Sowashee Creek.

What is the status of the Pipeline between East Plant and Marion and/or between Marion and Dalewood Sewer District?

Response: This comment is not germane to the modification of the permit. This question should be directed to the City of Meridian and the Town of Marion.

Does 40 CFR Part 123 supersede Mississippi Wastewater Regulations?

Response: Mississippi Wastewater Regulations cannot be less stringent than Federal Code, but can be more stringent. If Mississippi Wastewater Regulations do not address an issue, then the corresponding Federal Code requirement applies.

What is the condition of the Meridian treatment and collection systems?

Response: The current Compliance Evaluation Inspection of the South Meridian plant states, "The Meridian POTW appeared to be producing a higher quality effluent than noted in previous inspections. Changes made at the head works and in the aeration system appear to have greatly improved the operational efficiency of the rest of the plant, with very little foreign material impeding the biological processes in the treatment facility." The current Compliance Evaluation Inspection of the East Meridian plant states, "facility was operating properly at the time of the inspection." MDEQ Environmental Compliance and Enforcement Division's current Sanitary

Sewer Overflow Inspection did note problems with the collection system. The following recommendations were made based on the inspection:

- Perform pumping analysis at each of the lift stations for each pump.
- Maintain rainfall data for the area(s) and compare with the lift station data.
- Determine and prioritize I/I levels based on lift station data.
- Develop an inspection checklist for lift stations not on SCADA.
- Review and implement the SSO reporting procedures for the city.

Does the draft increase the flow to the South Meridian POTW?

Response: East Meridian's treated effluent is not combining with the flow through the South Meridian POTW. The treated effluent is combining with the treated effluent from the South Meridian POTW. The South Meridian plant will not lose capacity due to the modified permit.

Does the permit address Meridian's expansion of the sewer collection systems into the annexed area? Does the permit address Meridian's ability to accept potential new industries?

Response: Both the South and East POTWs are operating under their design capacities. This should allow for extension of sewer lines into annexed areas and other forms of growth. As stated previously; if in the future more flow is needed over the design capacities of the POTWs, then an application, with a complete antidegradation study, would be required to modify the permit to address said expansion.

Is there a concern for of inflow or infiltration into the treated effluent pipeline to the Mississippi Power facility?

Response: The pipeline is pressurized force main. The pipeline has been air tested to insure that the line has leak integrity.

Is the East Meridian plant built above the 100 year flood level?

Response: The base flood elevation for the 100 year flood at the East Meridian POTW treatment site is 341.0 feet. The wastewater treatment plant's bottom elevation is 342.0 feet, and the top of levee walls for the equalization basin are 342.0 feet, which meets the regulatory requirements.



STATE OF MISSISSIPPI
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TRUDY D. FISHER, EXECUTIVE DIRECTOR

CERTIFIED MAIL RETURN RECEIPT REQUESTED

November 27, 2013

Mr. Dan Check
Post Office Box 3271
Meridian, Mississippi 39303

Re: Meridian POTW
NPDES Permit Modification
Water Ref. No. MS0020227
Lauderdale County, MS

Dear Mr. Check:

In response to your facsimile to me dated November 19, 2013, the Mississippi Environmental Quality Permit Board ("Permit Board") considered the referenced permit modification at its meeting on Tuesday, November 12, 2013. The Permit Board considered the proposed permit modification at its public meeting and issued the modification after considering comments from MDEQ staff, Mr. Andrew Whitehurst, and you. You did submit correspondence at the Permit Board meeting dated November 12 and marked "Received Nov 12, 2013 Dept of Environmental Quality".

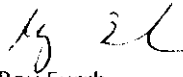
The Permit Board's consideration and decision at its meeting was not a hearing and thus there is no written transcript of the meeting. However, you may review the audio tape of the November meeting by making a public records request and arranging a time to review the tape with MDEQ's Public Records Administrator, Lorenzo Boddie. Mr. Boddie's email address is Lorenzo_Boddie@deq.state.ms.us and he may be reached by telephone at (601) 961-5758. The Permit Board generally only has evidentiary hearings transcribed at its meetings.

If you are aggrieved by the Permit Board's determination to issue the Permit Modification to Meridian, you may make a written request for an evidentiary hearing before the Permit Board pursuant to Miss. Code Ann. §49-17-29(4)(b) within thirty (30) days after the Permit Board took action upon the permit modification as recorded in its minutes.



If you have any questions related to this correspondence, please call me at (601) 961-5260.

Very truly yours,

A handwritten signature in black ink, appearing to read "Roy Furrh". The signature is written in a cursive style with a large initial "R" and a long, sweeping underline.

Roy Furrh
General Counsel

PERMIT RATIONALE FOR MODIFICATION

Meridian POTW
Lauderdale County
Meridian, Mississippi
Water NPDES No. MS0020117
April 26, 2013

CLASSIFICATION - Municipal Major

DESCRIPTION OF WASTEWATER – Domestic/ Municipal Wastewater

PURPOSE OF MODIFICATION – The City of Meridian has reached an agreement to supply the treated effluent from both of the City's wastewater treatment POTWs to the Mississippi Power Kemper County facility. The NPDES permit was modified on April 25, 2012 to address the agreement for the City of Meridian to supply wastewater Mississippi Power. The infrastructure required to supply the wastewater has been installed, and is in the start-up phase of operation. The City of Meridian requested that the permit be modified again based on actual operational conditions that became apparent during the start-up phase. The following is list of the changes:

- Fecal coliform limitations were removed from internal outfall 101 and 201 due to redundancy. Fecal coliform limitations required at outfall 002 before discharging to Sowashee Creek.
- Chlorine limitations were revised in internal outfall 101 from 0.011 mg/l monthly average to 0.3 mg/l minimum. The 0.3 mg/l limitation is required to ensure that an adequate supply of chlorine is the effluent from 101 to disinfect the effluent from internal outfall 201 when mixed. Outfall 002 has a 0.011 mg/l monthly average limitation to protect Sowashee Creek from chlorine toxicity.
- Corrected the seasonal limitation for BOD5 on internal outfall 101. The limitations were reversed based on the seasons.
- The flow on internal Outfall 201 will be done by calculations based on volume measurement, and not a continuous recorder.
- Sample types that were 24hr composites on internal outfall 201 have been changed to 8hr composites. The discharge period at 201 does not last longer than 8 hours.
- Corrected the seasonal limitations for BOD5 and Ammonia Nitrogen on outfall 002. The limitations were reversed based on the seasons.
- Added the following narrative requirement, "Effluent limitations and monitoring requirements for Outfalls 001, 002, 101, 201 as listed in this permit will only be applicable when the treated effluent from that outfall is ultimately discharged into Sowashee Creek." This means that if the effluent is sent to the Mississippi Power plant, then the effluent limitations and monitoring requirements will not apply.
- Added the following narrative requirement, "The facility shall record and make available upon request the durations of all discharges of treated wastewater from Outfall 002."



DESCRIPTION OF WASTEWATER TREATMENT – For Outfall 001 and Outfall 101 wastewater is collected and treated via second stage activated sludge followed by chlorination disinfection. For Outfall 201 wastewater is collected and treated via a sequencing batch reactor (SBR) followed by UV disinfection and post-aeration. **See attachment No. 1 for flow diagram.**

RECEIVING WATERS- Outfall 001 and 002 will discharge directly to Sowashee Creek. **See attachment No. 2 for discharge location map.** Sowashee Creek is classified as Fish and Wildlife, and is in the Pascagoula River Basin. The discharge is listed in a proposed TMDL for organic enrichment and low do in Sowashee Creek. Hence, a future TMDL may impose more stringent effluent limits. The effluent limitations included in the permit comply with load allocations given in the TMDL. A condition has been added to the permit which allows it to be reopened for revision based on a future TMDL.

The instream wastewater concentration (IWC) 7Q10 at the point of discharge is determined by the following calculation:

IWC calculation is as follows:

Q_w = Design flow of the wastewater treatment facility = 13 MGD or 20.1 cfs

Q_r = Receiving stream 7Q10 = 0.5 cfs

$IWC = (Q_w / (Q_w + Q_r)) * 100 = (20.1 / 20.1 + 0.5) = 97 \%$

APPLICABLE GUIDELINES - State of Mississippi Water Quality Criteria & “Wastewater Regulations for National Pollutant Discharge Elimination System Permits, Underground Injection Control Permits, State Permits, Water Quality Based Effluent Limitations , Water Quality Criteria (MSWQC), Water Quality Certification” applicable. Wasteload Allocation (WLA), Total Maximum Daily Load (TMDL)

SUMMARY OF LIMITATIONS

Outfall 001 (Current Meridian POTW treated effluent outfall line into Sowashee Creek)

Parameter	Value	Basis
Flow	13.0 MGD	Design
CBOD ₅ (May-Oct)	7 mg/l (Monthly Avg.)	WLA
CBOD ₅ (Nov-Apr)	10 mg/l (Monthly Avg.)	WLA
CBOD ₅ (Percent Removal)	85% Minimum	Technology
TSS	30 mg/l (Monthly Avg.)	Technology
TSS (Percent Removal)	85% Minimum	Technology
NH ₃ -N (May-Oct)	1 mg/l (Monthly Avg.)	WLA
NH ₃ -N (Nov-Apr)	2 mg/l (Monthly Avg.)	WLA
Dissolved Oxygen	> 6.0 mg/l (Monthly Avg.)	WLA
Fecal Coliform	200 mg/l (Monthly Avg.)	WPC-2
pH	6.0 – 9.0 SU	WPC-2
Chlorine, Total Residual	0.011 / 0.019 mg/l	WPC-2, IWC
Copper, Total Recoverable	0.0051 / 0.0072 mg/l	WPC-2, IWC
Cyanide (Free -- Amen to Chlor.)	0.0053 / 0.0226 mg/l	WPC-2, IWC
Total Nitrogen	Report	*
Total Phosphorus	Report	*

The minimum and maximum values for Dissolved Oxygen in aeration unit and 30-Minute Sludge Settleability in aeration unit must be reported

Outfall 002 (Combined effluent from internal Outfalls 101 and 201 into Sowashee Creek)

Parameter	Value	Basis
Flow	13.0 MGD	Design
CBOD ₅ (May-Oct)	759 lbs/day (Monthly Avg.)	WLA
CBOD ₅ (Nov-Apr)	1084 lbs/day (Monthly Avg.)	WLA
TSS	3253 lbs/day (Monthly Avg.)	Technology
NH ₃ -N (May-Oct)	108 lbs/day (Monthly Avg.)	WLA
NH ₃ -N (Nov-Apr)	217 lbs/day (Monthly Avg.)	WLA
Dissolved Oxygen	> 6.0 mg/l (Monthly Avg.)	WLA
Fecal Coliform	200 mg/l (Monthly Avg.)	WPC-2
pH	6.0 – 9.0 SU	WPC-2
Chlorine, Total Residual	0.011 / 0.019 mg/l	WPC-2, IWC
Total Nitrogen	Report	*
Total Phosphorus	Report	*

Outfall 101 (Internal outfall after final treatment by Meridian POTW)

<u>Parameter</u>	<u>Value</u>	<u>Basis</u>
Flow	13.0 MGD	Design
CBOD ₅ (May-Oct)	7 mg/l (Monthly Avg.)	WLA
CBOD ₅ (Nov-Apr)	10 mg/l (Monthly Avg.)	WLA
CBOD ₅ (Percent Removal)	85% Minimum	Technology
TSS	30 mg/l (Monthly Avg.)	Technology
TSS (Percent Removal)	85% Minimum	Technology
NH ₃ -N (May-Oct)	1 mg/l (Monthly Avg.)	WLA
NH ₃ -N (Nov-Apr)	2 mg/l (Monthly Avg.)	WLA
pH	6.0 - 9.0 SU	WPC-2
Chlorine, Total Residual	0.3 mg/l minimum	Calculation
Copper, Total Recoverable	0.0051 / 0.0072 mg/l	WPC-2, IWC
Cyanide (Free - Amen to Chlor.)	0.0053 / 0.0226 mg/l	WPC-2, IWC
Total Nitrogen	Report	*
Total Phosphorus	Report	*

The minimum and maximum values for Dissolved Oxygen in aeration unit and 30-Minute Sludge Settleability in aeration unit must be reported

Outfall 201 (Internal outfall after final treatment by East Meridian POTW)

<u>Parameter</u>	<u>Value</u>	<u>Basis</u>
Flow	13.0 MGD	Design
CBOD ₅ (May-Oct)	7 mg/l (Monthly Avg.)	WLA
CBOD ₅ (Nov-Apr)	10 mg/l (Monthly Avg.)	WLA
CBOD ₅ (Percent Removal)	85% Minimum	Technology
TSS	30 mg/l (Monthly Avg.)	Technology
TSS (Percent Removal)	85% Minimum	Technology
NH ₃ -N (May-Oct)	1 mg/l (Monthly Avg.)	WLA
NH ₃ -N (Nov-Apr)	2 mg/l (Monthly Avg.)	WLA
Fecal Coliform	200 mg/l (Monthly Avg.)	WPC-2
pH	6.0 - 9.0 SU	WPC-2
Total Nitrogen	Report	*
Total Phosphorus	Report	*

The minimum and maximum values for Dissolved Oxygen in aeration unit and 30-Minute Sludge Settleability in aeration unit must be reported

Attachments

- Attachment 1 See September 11, 2011 Application
- Attachment 2 See September 11, 2011 Application
- Attachment 3 See September 11, 2011 Application

***Total Nitrogen and Total Phosphorus monitoring was added to the permit based on Gulf Coast Hypoxia.**

The combined effluent discharge from Outfall 101 and Outfall 201 shall not total over 13 million gallons per day (Monthly Average).

The limitations for East Meridian POTW were reduced from the previous issuance in order to reflect the effluent concentration required by Meridian POTW.

BOD5, NH3-N and DO limits are based on the Wasteload Allocation and STREAM modeled, which accounts for oxygen depletion in the receiving stream. The toxicity limit for NH3-N was determined. For NH3-N the more stringent of the modeled limit and the toxicity limit is what is given in the Wasteload Allocation, to meet Water Quality Based Effluent Limitations (WQBELs).

Upon permit issuance the Permittee shall operate under the Effluent Limitations and Monitoring Requirements for Outfall 001. Effluent Limitations and Monitoring Requirements for Outfalls 002, 101, and 201 shall not apply. Upon completion and operation of the infrastructure to connect Meridian POTW, East Meridian POTW, and Mississippi Power Company's Kemper County Facility the Permittee shall operate under the Effluent Limitations and Monitoring Requirements for Outfalls 002, 101, and 201. Effluent Limitations and Monitoring Requirements for Outfall 001 shall not apply.

